decline in titre from the onset of cortisone treatment, but only in two of the sero-reactions was it significantly greater than in the control group. After the fall, a second rise in titre occurred in Group 2, in contradistinction to the continued fall in the controls. No conclusions could be drawn from Group 3, as only two of the animals reached significant reagin titres.

The relations between the different sero-reactions did not alter materially as a result of cortisone treatment. No demonstrable effect on the TPI titres was found.

Clinically, the orchitis was delayed in onset and remained slight in three of the four animals in Group 1. Six of the eight animals in Group 2 and two of the four animals in Group 3 showed very pronounced aggravation of the lesions during cortisone treatment. Loss of weight and poor general condition were found in most of the cortisone-treated animals, and those most severely affected developed marked lipaemia.

The fact that "reagins" are affected by cortisone in the same manner as a number of known antibodies is quoted as compatible with the concept of reagins as true antibodies.

## REFERENCES

Berglund, K. (1956). "Studier över faktorer som betinga cortisonets effekt på antikroppsbildningen". Thesis, Stockholm. Bjørneboe, M., Fischel, E. E., and Stoerck, H. C. (1951). J. exp. Med., 93, 37

93, 37.

DeLamater, E. D., Saurino, V. R., and Urbach, F. (1952). Amer. J. Syph., 36, 127.

De Graciansky, P., and Grupper, C. (1955). Sem Hôp. Paris, 31, 2141. Dews, P. B., and Code, C. F. (1953). J. Immunol., 70, 199. Dougherty, T. F., White, A., and Chase, J. H. (1944). Proc. Soc. exp. Biol. (N. Y.), 56, 28.

Finney, D. J. (1947). "Probit Analysis", p. 39. University Press, Cambridge.

Fischel, E. E., LeMay, M., and Kabat, E. A. (1949). J. Immunol., 61, 80.

Neurath, H., Volkin, E., Ecikay, N., and Photopoulos, C. (1952). Proc. Soc. exp. Biol. (N.Y.), 81, 344.

Harris, A., Rosenberg, A. A., and Riedel, L. M. (1946). Vener. Dis. Inform., 27, 169.

Kahn, R. L. (1928). "The Kahn Test. A Practical Guide". Williams and Wilkins, Baltimore.

Laurell, A.-B. (1955). Acta path. microbiol. scand., Suppl. 103.

Nelson, R. A., and Mayer, M. M. (1949). J. exp. Med., 89, 369.

Neurath, H., Volkin, E., Erickson, J. O., Craig, H. W., Putnam, F. W., and Cooper, G. R. (1947). Amer. J. Syph., 31, 347.

Nicol, T., Snell, R. S., and Bilbey, D. L. J. (1956). Brit. med. J., 2, 800.

Nielsen, H. A. (1957). Acta path. microbiols. scand., 40, 119.

Overman, J. R., and Hanan, R. (1953). Proc. Soc. exp. Biol. (N.Y.), 82, 427.

Schmidt, H. (1951). British Journal of Venereal Diseases, 27, 23.

Schmidt, H. (1951). British Journal of Venereal Diseases, 27, 23.

(1955a). Acta path. microbiol. scand., 36, 141. (1955b). Ibid., 37, 252. (1956). "Cardiolipin Antigen. En oversigt". Thesis, Copenhagen.

and Birch-Andersen, A. (1956). Acta path. microbiol. scand.,

39, 47.
Turner, T. B., and Hollander, D. H. (1950). Bull. Johns Hopk. Hosp., 87, 505.

———— (1954). Amer. J. Syph., 38, 371. Vannier, W. E. (1956). Proc. Soc. exp. Biol. (N.Y.), 91, 514.

## CORRESPONDENCE

To the Editor of the British Journal of Venereal Diseases.

Dear Sir.

I was particularly interested in the article by Dr. R. S. Morton on "Side-Effects of Penicillin Treatment" (Brit. J. vener. Dis., 1957, 33, 176), and should like to confirm his findings more particularly in relation to the anaphylactoid reactions which have followed the intramuscular injection of penicillin-G and the procaine salt of penicillin aqueous suspension in the treatment of gonorrhoea and syphilis. The onset of the anaphylactoid reaction in some patients bore no relation to the dose of penicillin-G or procaine penicillin administered. For example, one clinician with whom I discussed this question advised me that patients with early syphilis treated with one mega unit penicillin-G experienced an anaphylactoid reaction.

There is also much more evidence of anaphylactoid reactions after the use of procaine penicillin in the treatment of venereal diseases than has been noted in the medical press.

It was, therefore, surprising to me that Dr. Morton gave no examples of the apparent freedom from anaphylactoid reactions in patients treated with P.A.M. I cannot recall any personally communicated or published examples of this type of reaction occurring after the use of P.A.M. In one clinic it was routine to treat old cases of syphilis with weekly injections of 8 mil. P.A.M. for a period of 4 weeks and no untoward reactions occurred.

Yours faithfully,

W. H. SIMS

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November 8, 1957.